

Science Skills Ladder

Pathfinders 1

Sc1 Suggest what might happen and perform simple tests

Sc2 Explore using senses and record findings in simple ways

Sc3 Collect evidence to try to answer a question

Sc4 Make simple comparisons through observation

Sc5 Identify and classify based on simple criteria

Pathfinders 2

Sc6 Explore and observe in order to collect data and describe and compare findings

Sc7 With help, suggest some ideas and questions and predict what might happen

Sc8 Use first-hand observation, own experience and simple information sources to make comparisons and answer questions

Sc9 Observe closely using simple equipment

Sc10 Recognise ways in which evidence can be collected

Sc11 Use simple scientific language

Sc12 Perform simple tests

Sc13 Record findings in various formats using standard units, drawings, diagrams, photographs, simple prepared formats such as tables and charts, tally charts, and displays

Sc14 Say whether what happened was what was expected and draw simple conclusions to help answer questions





Science Skills Ladder

Adventurers 1

Adventurers 2

Sc15 Ask relevant questions

Sc16 With help, set up and carry out simple practical enquiries, comparative and fair tests

Sc17 Suggest what might happen in comparative and fair tests

Sc18 Make careful observations and comparisons

Sc19 Recognise what constitutes a fair test

Sc20 Identify simple patterns, changes, similarities and differences

Sc21 Make measurements using standard units

Sc22 Discuss and describe findings

Sc23 Communicate findings using simple scientific language in written explanations, drawings, labelled diagrams, keys, bar charts or tables

Sc24 Use results to draw simple conclusions

Sc25 Set up and carry out simple practical enquiries, comparative and fair tests

Sc26 Put forward ideas about testing and make predictions

Sc27 Make close observations and comparisons

Sc28 Observe patterns and suggest explanations

Sc29 Collect data

Sc30 Recognise and explain why a test is fair or unfair

Sc31 Identify simple trends to answer questions

Sc32 Make accurate measurements using standard units and begin to think about why measurements should be repeated

Sc33 Use scientific evidence to answer questions

Sc34 Use a range of equipment, including data loggers and thermometers

Sc35 Gather and record findings through drawings, photographs, labelled diagrams, keys, models, presentations, tables, graphs and displays, using scientific language

Sc36 Report on what the evidence shows through written explanations of results and conclusions and reports

Sc37 Use results to draw simple conclusions, suggest improvements and raise further questions





Science Skills Ladder

Navigators 1

Sc38 Plan different types of scientific investigations

Sc39 Make predictions based on scientific knowledge

Sc40 Carry out a range of scientific investigations

Sc41 Begin to recognise and control variables where appropriate during investigations

Sc42 Identify trends and patterns and offer explanations for these

Sc43 Carry out a fair test explaining why it is fair

Sc44 Take measurements using a range of scientific equipment with increasing accuracy and precision

Sc45 Understand why observations and measurements need to be repeated

Sc46 Select information from provided sources

Sc47 Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, bar and line graphs

Sc48 Produce written explanations of results, causal explanations and conclusions

Sc49 Use results to make predictions for further tests

Navigators 2

Sc50 Select and plan the most appropriate type of scientific enquiry to answer specific questions

Sc51 Make predictions based on scientific knowledge and understanding

Sc52 Carry out a range of scientific investigations

Sc53 Recognise and control variables where appropriate during investigations

Sc54 Identify scientific evidence that has been used to support or refute ideas

Sc55 Take measurements using a range of scientific equipment with accuracy and precision

Sc56 Decide when observations and measurements need to be checked, by repeating, to give more reliable data

Sc57 Select information from a range of sources

Sc58 Record data and results of increasing complexity, using scientific diagrams and labels, classification keys, tables, bar and line graphs, and models, making appropriate use of ICT

Sc59 Reporting findings from investigations, including written explanations of results, explanation involving causal relationships, and conclusions

Sc60 Present reports of findings in written form, displays and presentations

Sc61 Use test results to make predictions and set up further comparative and fair tests

